

IN THE CLAIMS:

Please cancel Claims 4, 6, 10, 12, 16 and 18 without prejudice or disclaimer of subject matter and amend the claims as shown below. The claims, as pending in the subject application, read as follows:

1. (Currently Amended) An image processing apparatus for executing an error diffusion process to a plurality of density components, comprising:

a processor and a memory;

a first processing unit that executes the error diffusion process by changing at least one of a quantization threshold value and a quantization diffusion coefficient which are used for the error diffusion process on the basis of information on one of the density components to be processed;

a second processing unit that executes the error diffusion process by setting, into fixed values, the quantization threshold value and the quantization diffusion coefficient which are used for the error diffusion process, wherein the error diffusion process by the second processing unit requires a lighter processing load than the error diffusion process by the first processing unit; and

an error diffusion processing control unit that controls to execute, by the first processing unit, the error diffusion process to ~~density components of a similar color a~~ first density component among the plurality of density components ~~by executing the error diffusion process to the density component whose highest density which can be expressed is low, and executing,~~ by the second processing unit, the error diffusion process to ~~the a~~

second density component whose highest density which can be expressed is high among the plurality of density components

wherein the first and second density components have respective different component types and wherein one dot output based on the first density component has a lower density than one dot output based on the second density component.

2. (Canceled)

3. (Previously Presented) An apparatus according to claim 1, wherein said first processing unit is an error diffusion process for executing quantization on the basis of information of the other density components among said plurality of density components.

4. to 6. (Canceled)

7. (Currently Amended) An image processing method of executing an error diffusion process to a plurality of density components, comprising:

a first processing step of executing the error diffusion process by changing at least one of a quantization threshold value and a quantization diffusion coefficient which are used for the error diffusion process on the basis of information on one of the density components to be processed;

a second processing step of executing the error diffusion process by setting, into fixed values, the quantization threshold value and the quantization diffusion coefficient which are used for the error diffusion process, wherein the error diffusion

process by the second processing step requires a lighter processing load than the error diffusion process by the first processing step; and

an error diffusion processing control step of controlling to execute, by the first processing step, the error diffusion process to ~~the density components of a similar color~~ a first density component among the plurality of density components ~~by executing, by the first processing step, the error diffusion process to the density component whose highest density which can be expressed is low, and executing, by the second processing step, the error diffusion process to the~~ a second density component whose highest density which can be expressed is high among the plurality of density components.

wherein the first and second density components have respective different component types and wherein one dot output based on the first density component has a lower density than one dot output based on the second density component.

8. (Canceled)

9. (Original) A method according to claim 7, wherein said first processing step is an error diffusion process for executing quantization on the basis of information of the other density components among said plurality of density components.

10. to 12. (Canceled)

13. (Currently Amended) A computer-readable storage medium on which is stored an image processing program for executing an error diffusion process to a plurality of density components, wherein said program comprises:

a first processing step of executing the error diffusion process by changing at least one of a quantization threshold value and a quantization diffusion coefficient which are used for the error diffusion process on the basis of information on one of the density components to be processed;

a second processing step of executing the error diffusion process by setting, into fixed values, the quantization threshold value and the quantization diffusion coefficient which are used for the error diffusion process, wherein the error diffusion process by the second processing step requires a lighter processing load than the error diffusion process by the first processing step; and

an error diffusion processing control step of controlling to execute, by the first processing step, the error diffusion process to ~~the density components of a similar color~~ a first density component among the plurality of density components ~~by executing, by the first processing step, the error diffusion process to the density component whose highest density which can be expressed is low, and executing, by the second processing step, the error diffusion process to the~~ a second density component whose highest density which can be expressed is high among the plurality of density components,

wherein the first and second density components have respective different component types and wherein one dot output based on the first density component has a lower density than one dot output based on the second density component.

14. (Canceled)

15. (Previously Presented) A computer-readable storage medium according to claim 13, wherein said first processing step is an error diffusion process for executing quantization on the basis of information of the other density components among said plurality of density components.

16. to 24. (Canceled)

25. (Currently Amended) An image processing apparatus for executing an error diffusion process to a plurality of density components, comprising:

a processor and a memory;

a first processing unit that executes the error diffusion process by changing at least one of a quantization threshold value and a quantization diffusion coefficient which are used for the error diffusion process on the basis of information on one of the density components to be processed;

a second processing unit that executes the error diffusion process by setting, into fixed values, the quantization threshold value and the quantization diffusion coefficient which are used for the error diffusion process, wherein the error diffusion process by the second processing unit requires a lighter processing load than the error diffusion process by the first processing unit; and

an error diffusion processing control unit that controls to execute, by the first processing unit, the error diffusion process ~~of the density components of a similar~~

~~color to a first density component among the plurality of density components by executing,~~  
~~by the first processing unit, the error diffusion process to the density component whose~~  
~~droplet is small, and executing, by the second processing unit, the error diffusion process to~~  
~~the a second density component whose droplet is large among the plurality of density~~  
~~components.~~

wherein the first and second density components have respective different  
component types and wherein one droplet output based on the first density component has  
a smaller size than one droplet output based on the second density component.

26. (Currently Amended) A method for an image processing apparatus for  
executing an error diffusion process to a plurality of density components, comprising:

a first processing step for executing the error diffusion process by changing  
at least one of a quantization threshold value and a quantization diffusion coefficient which  
are used for the error diffusion process on the basis of information on one of the density  
components to be processed;

a second processing step for executing the error diffusion process by setting,  
into fixed values, the quantization threshold value and the quantization diffusion  
coefficient which are used for the error diffusion process, wherein the error diffusion  
process by the second processing step requires a lighter processing load than the error  
diffusion process by the first processing step; and

an error diffusion processing control step for controlling to execute, by the  
first processing step, the error diffusion process ~~of the density components of a similar~~  
~~color to a first density component among the plurality of density components by executing,~~

~~by the first processing means, the error diffusion process to the density component whose droplet is small, and executing;~~ by the second processing means step, the error diffusion process to ~~the~~ a second density component ~~whose droplet is large~~ among the plurality of density components.

wherein the first and second density components have respective different component types and wherein one droplet output based on the first density component has a smaller size than one droplet output based on the second density component.

27. (Currently Amended) A computer-readable storage medium on which is stored a program for executing an error diffusion process to a plurality of density components, the program comprising:

a first processing step for executing the error diffusion process by changing at least one of a quantization threshold value and a quantization diffusion coefficient which are used for the error diffusion process on the basis of information on one of the density components to be processed;

a second processing step for executing the error diffusion process by setting, into fixed values, the quantization threshold value and the quantization diffusion coefficient which are used for the error diffusion process, wherein the error diffusion process by the second processing step requires a lighter processing load than the error diffusion process by the first processing step; and

an error diffusion processing control step for controlling to execute, by the first processing step, the error diffusion process ~~of the density components of a similar color~~ to a first density component among the plurality of density components ~~by executing;~~

~~by the first processing means, the error diffusion process to the density component whose droplet is small, and executing, by the second processing means step, the error diffusion process to the a second density component whose droplet is large among the plurality of density components.~~

wherein the first and second density components have respective different component types and wherein one droplet output based on the first density component has a smaller size than one droplet output based on the second density component.

28. (New) An apparatus according to claim 1, wherein the plurality of density components correspond to respective different colorants used in image formation, and wherein a first one of the colorants corresponding to the first density component and a second one of the colorants corresponding to the second density component have similar colors and wherein the first colorant has a lower density than the second colorant.

29. (New) An apparatus according to claim 1, wherein one dot outputted based on the first density component has a smaller size than one dot based on the second density component.